

**IN THE CLAIMS:**

1           1.     (Original) A manufacturing method for a plasma display panel by which  
2     electrodes are formed on a surface of a substrate in a first process and a dielectric glass layer is  
3     formed on the electrodes in a second process, the second process comprising:  
4                 a grinding step for grinding a dielectric glass material;  
5                 a spheroidizing step for converting each particle of the ground dielectric glass  
6     material into a spheroidal form;  
7                 an applying step for applying a mixture of the spheroidal dielectric glass particles  
8     and a binder, as a layer, to the surface of the substrate on which the electrodes are formed; and  
9                 a firing step for firing the layer to remove the binder from the layer, thereby  
10    forming a dielectric glass layer.

1           2.     (Original) The manufacturing method of Claim 1,  
2                 wherein the spheroidizing step is performed by melting the surface of particles of  
3     the ground dielectric glass material.

1           3.     (Original) The manufacturing method of Claim 2,  
2                 wherein the melting is performed by putting the particles of the ground dielectric  
3     glass material into a plasma jet.

1           4.     (Original) The manufacturing method of Claim 2,  
2                 wherein the melting is performed by exposing the particles of the ground  
3     dielectric glass material to an atmosphere at a temperature no higher than the softening point of  
4     the particles.

1           5.     (Original) The manufacturing method of Claim 1,  
2                 wherein the spheroidizing step is performed by having the particles of the glass  
3     material collide with one another in high-speed gas flows.

1           6.     (Original) The manufacturing method of Claim 1,  
2                 wherein the second process further comprises a step of classifying the glass  
3     particles, which is performed between the spheroidizing step and the applying step, so that a  
4     maximum diameter of the spheroidal particles of the dielectric glass material does not exceed a  
5     half thickness of the dielectric glass layer after the firing step.

1           7.     (Original) The manufacturing method of Claim 1,  
2                 wherein the applying step is performed by placing a dielectric glass sheet on the  
3     surface of the substrate, the dielectric glass sheet being obtained by mixing the spheroidal glass  
4     particles with a thermoplastic resin.

1           8-14.   (Cancelled)

1           15.    (New) The manufacturing method of Claim 1, wherein  
2                 in the firing step, the firing is performed at a temperature in a range of 550°C to  
3     590°C.

1           16.    (New) The manufacturing method of Claim 2, wherein  
2                 in the spheroidizing step, the spheroidizing is performed until a surface of more  
3     than 90 weight percent of the ground dielectric glass material is melted.

1           17.   (New) A manufacturing method for a plasma display panel by which electrodes  
2   are formed on a surface of a substrate in a first process and a dielectric glass layer of a  
3   predetermined thickness is formed on the electrodes in a second process, the second process  
4   comprising:

5                   a grinding step for grinding a dielectric glass material selected from a group  
6   consisting of   PbO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-CaO;       PbO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-MgO;       PbO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-BaO;  
7   PbO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-MgO-Al<sub>2</sub>O<sub>3</sub>;    PbO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-BaO-Al<sub>2</sub>O<sub>3</sub>;    PbO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-CaO-Al<sub>2</sub>O<sub>3</sub>;  
8   ZnO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub>-CaO;    P<sub>2</sub>O<sub>5</sub>-ZnO-Al<sub>2</sub>O<sub>3</sub>-CaO; and       Nb<sub>2</sub>O<sub>5</sub>-ZnO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-CaO;

9                   a spheroidizing step for converting the ground dielectric glass material into  
10   spheroidal particles;

11                  a selecting step for selecting a maximum diameter of the spheroidal particles to  
12   not exceed one half the thickness of the predetermined dielectric glass layer;

13                  an applying step for applying a mixture of the selected spheroidal particles and a  
14   binder, as a layer, to the surface of the substrate on which the electrodes are formed; and

15                  a firing step for firing the layer to uniformly remove the binder from the layer,  
16   thereby forming a dielectric glass layer of the predetermined thickness.

1           18.   (New) The manufacturing method of Claim 17,  
2                  wherein the spheroidizing step is performed by melting the surface of more than  
3   90 weight percent of the glass particles of the ground dielectric glass material.

1           19.   (New) The manufacturing method of Claim 18,  
2                   wherein the melting is performed by putting the particles of the ground dielectric  
3 glass material into a plasma jet having a discharge gas of 10 L/minute and a plasma current of  
4 300A.

1           20.   (New) The manufacturing method of Claim 19, wherein a firing step temperature  
2 is set to enable the binder to burn out before the glass particles reach the softening point to  
3 suppress the number of bubbles in the dielectric glass layer.